Consumer Electronics Association

PRODUCER OF International CES

CEC Workshop 1/30/06

Industry Recommendations

for adjustments to

CEC EPS Regulations

Suggested Adjustments to CEC EPS Regulations

1. Eliminate the 230 Volt testing requirement
2. New implementation date – 7/1/07
3. Exempt infrequent use products

#1 - Omit 230V Testing

- The physical, mechanical shape of the plug defines the voltage at which the product is designed to be used
- Manufacturers ship products for the US market with power plugs that only fit into 120V sockets
- Normal consumer wall sockets within California (and the rest of the US) contain only 120V electricity, never 230V
- NEMA (National Electrical Manufacturers Association) plug and socket configurations are designed to prevent connection of 120V products to 230V power
- Even if we wanted to, there are only 2 ways to get 230V test current into a US market CE product (both are bad)
  1. Circumvent the manufacturer's design and connect use some non-standard, home-made, jury-rigged power cord
  2. Insert the standard plug into some type of adapter

US National Electrical Code

In California, and the rest of the US, in compliance with the NEC (National Electrical Code) manufacturers of electrical products that consume less than 15 amps use only two power cord plug configurations –

3 prong

2 prong

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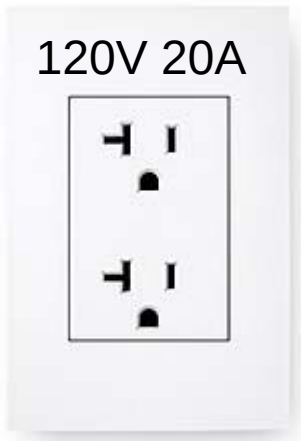


NEMA AC Plug Configurations

NEMA 1-15P

NEMA 5-15P

15 amp Plugs

Voltage	Receptacle	Plug
250V	2-15R	2-15P
250V	6-15R	6-15P
277V, A.C.	7-15R	7-15P
3¢250V	11-15R	11-15P
125V/250V	14-15R	14-15P
3¢250V	15-15R	15-15P
3¢Y 120/208V	18-15R	18-15P

20 amp Plugs

Voltage	Receptacle	Plug
250V	2-20R	2-20P
250V	6-20R	6-20P
277V, A.C.	7-20R	7-20P
125V/250V	10-20R	10-20P
3¢250V	11-20R	11-20P
125V/250V	14-20R	14-20P
3¢250V	15-20R	15-20P
3¢Y 120/208V	18-20R	18-20P

Paraphrasing Johnny Cochran…

“If the plug don’t fit, you must omit.”

#2 - Delay EPS Tier 1 to 7/1/07

- Give CE one complete product cycle to comply
  - CE product introductions once per year – typically in spring or summer. Retailers will not add new products after September because they are preparing for the 3 month Holiday Selling Season which is when they do the majority of their annual business.
  - CE engineering development cycle is 12 months
  - CE procurement cycle is 6 months
  - Shipping by boat from Malaysia takes 4-6 weeks
- Rush orders and shorter engineering development times cost more than regular business cycles
- By 7/1/06, EPS supply chain cannot supply enough EPS units which are compliant with current CEC regulations to meet total industry demand

CE Industry Development Cycles

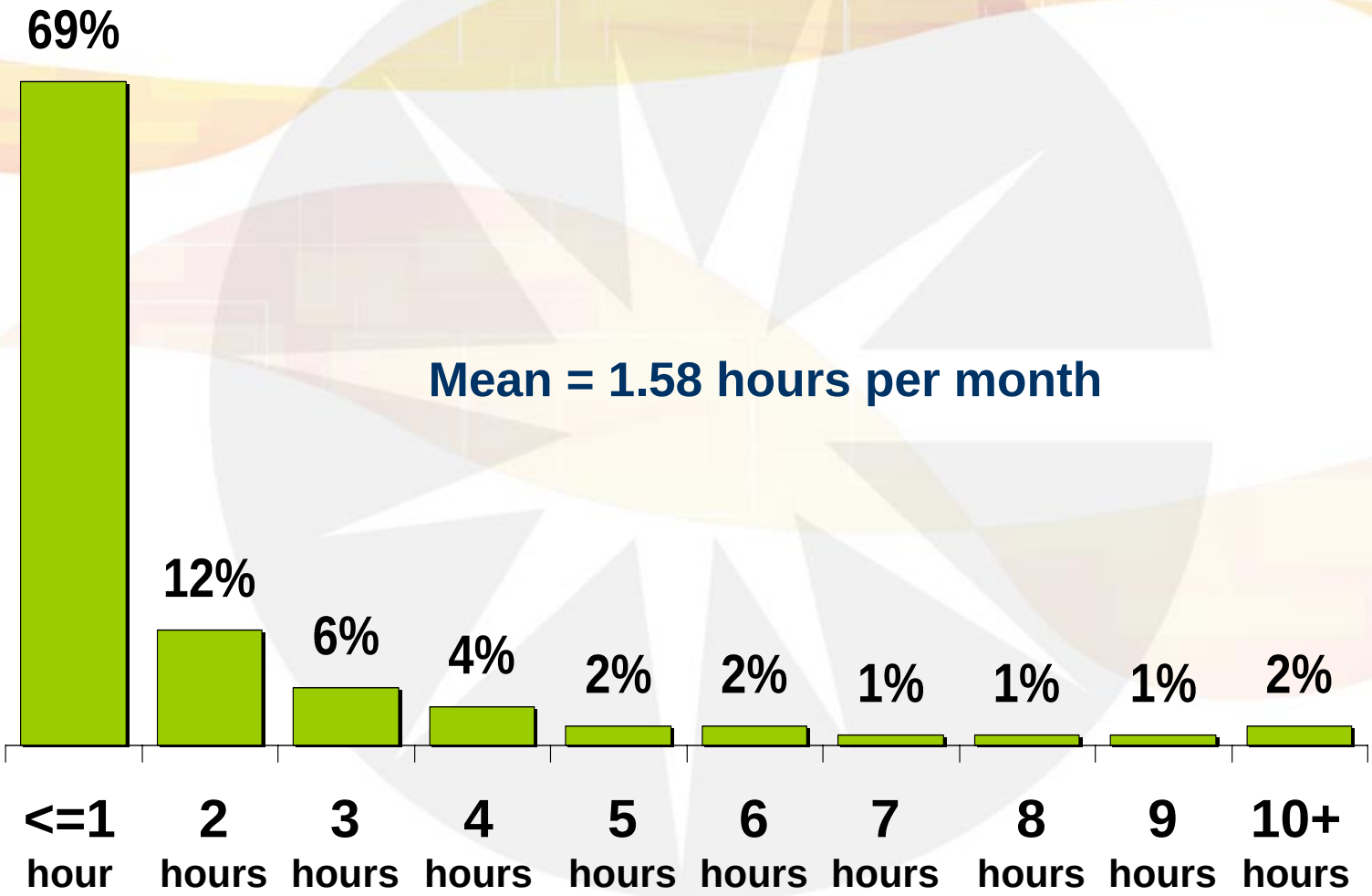
- In the spirit of collaboration, and getting to know the reality of our industry, we present information to optimize the success of these regulations
- A once a year cycle of model introductions
- Two year cycle of product development
  1. Planning (6) – What will we do?
  2. Engineering (6) – How best to do it?
  3. Parts Procurement / Delivery (6) – How to reduce costs?
  4. Prototyping and Evaluation (4) – If we build it, does it work?
  5. Pilot production, Final QA approval (2) – Go or no go?
  6. Production – 1 day
  7. Shipping (2) – “Slow boat to China”
- Rush orders cost consumers money

#3 – "Infrequent Use" Products Exempted from CEC Regulations

- Definition of "Infrequent Use"
  - Not used daily
  - Used once a month or less
  - Used during infrequent special events like birthdays, weddings, graduations, holidays, vacations
- If a product is used infrequently, it is not usually left plugged into a wall socket 24/7/365
- If a product is used infrequently, it is put in a closet or drawer, and brought out to be charged just before use

Hours of Video Recording per Month

Among households with a camcorder or other video capture device



Source: CEA Market Research 2005 Digital Imaging Study

Market Segmentation:

By Hours of Video Recording per Month

Power Users

Average 6.6 hours per month

13% of the market

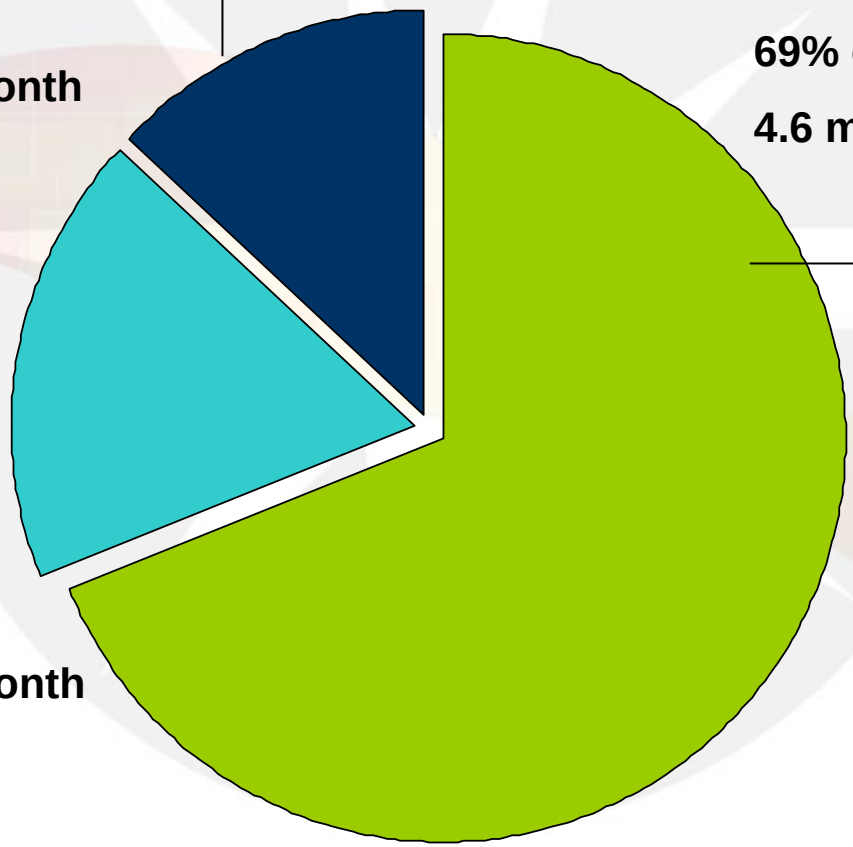
0.9 million households

Casual Users

Average 1 hour per month

69% of the market

4.6 million households



Steady Users

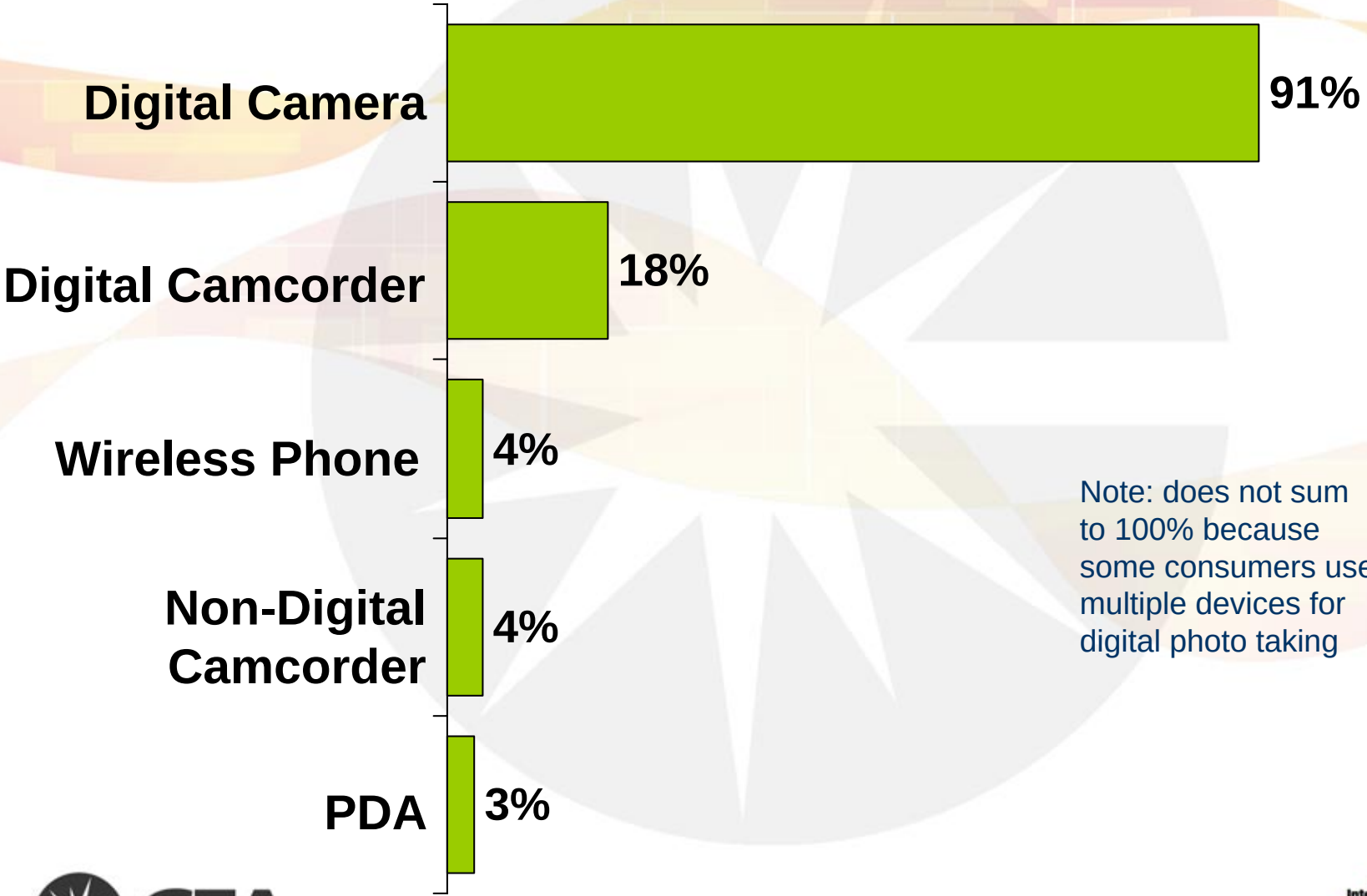
Average 2.3 hours per month

18% of the market

1.2 million households

Source: CEA Market Research 2005 Digital Imaging Study

Primary Devices for Taking Digital Photos

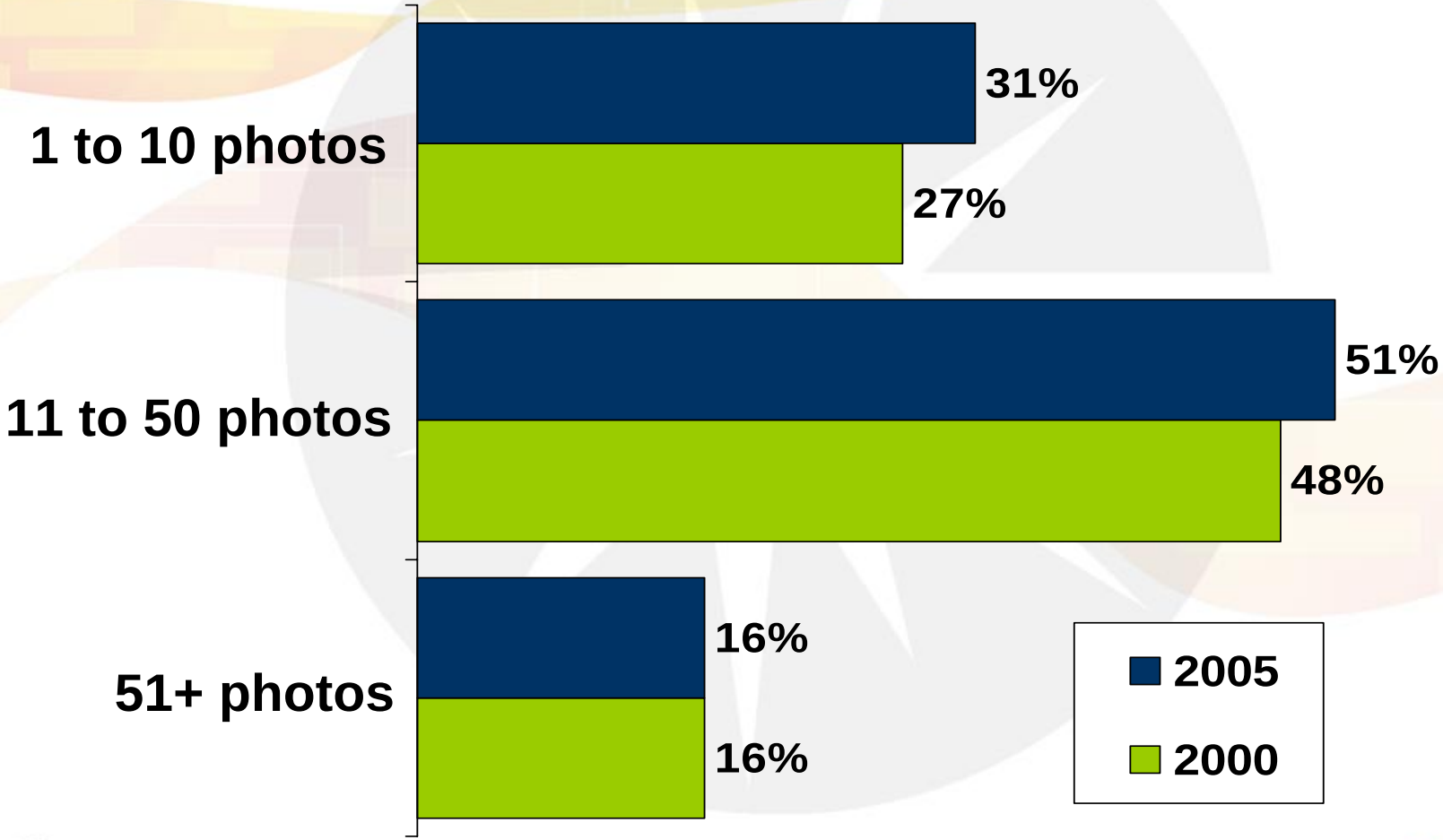


Note: does not sum to 100% because some consumers use multiple devices for digital photo taking

Source: CEA Market Research 2005 Digital Imaging Study

of Digital Photos Taken Per Month

Mean = 22 photos per month



Source: CEA Market Research 2005 Digital Imaging Study

Market Segmentation:
By # of Dig Photos Taken

Casual Users

Average 9 photos per month

50% of the market

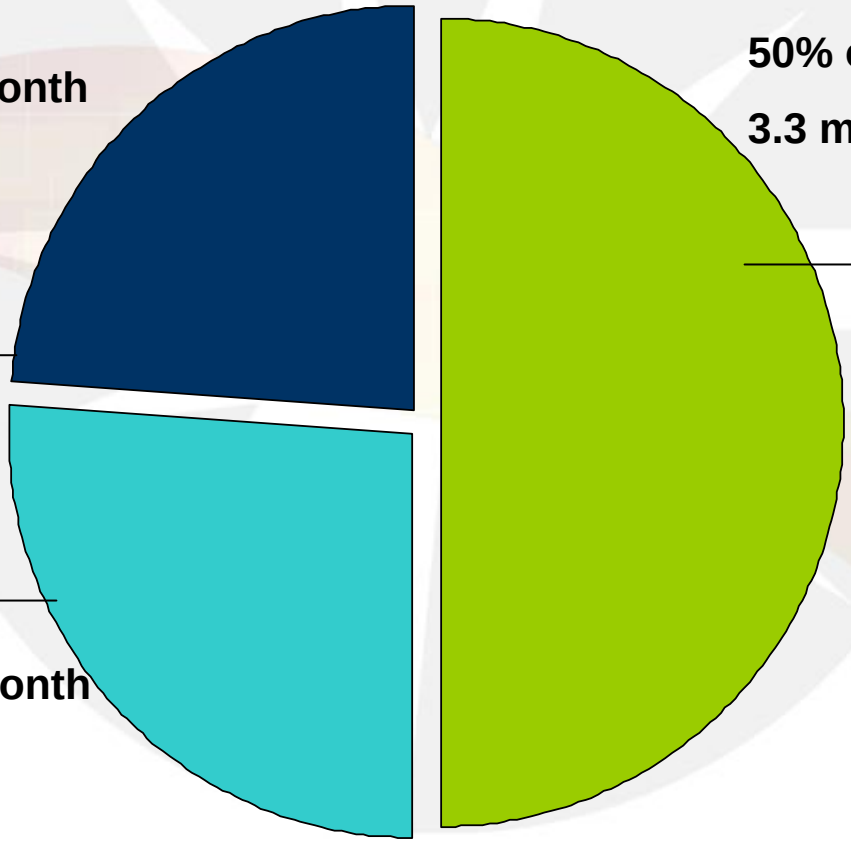
3.3 million households

Power Users

Average 49 photos per month

24% of the market

1.6 million households



Steady Users

Average 29 photos per month

26% of the market

1.7 million households

Source: CEA Market Research 2005 Digital Imaging Study

Additional "Infrequent Use" Products

- **Portable Radios - FRS/GMRS Radios, Marine Radios, Handheld CB Radios** with external power supplies which are used as battery chargers. These products are primarily used in recreational or vacation activities. Charge them up the day before you go to Disneyland or hiking or out on the boat. CBs are used infrequently, like on a long road trip, to communicate with truckers or other vehicles while driving. If a consumer is serious about CB, they will have one permanently installed in the vehicle.
- **Portable Navigation Devices** sold with external power supplies. These actually operate on 12V in the car, and the external power supply is used by the customer to program in locations (addresses) into the Navigation device inside his house. This is probably only used less than 20 hours per year.
- **Chartplotters** sold with external power supplies. These actually operate on 12V in the boat. The external power supply is used by the customer to program in locations (fishing spots, safe routes, etc.) into the Chartplotter inside his house. This is probably only used less than 20 hours per year.
- **Medical Devices** monitor, diagnose, communicate the patient's medical conditions and treatment.

Conclusions

1. Eliminate 230 Volt testing requirement
2. New EPS implementation date – 7/1/07
3. Exempt “infrequent use” products

Thank you for your attention

Questions…?
Comments…?
Positive Suggestions…?

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